

Ref: 02208-05001-32004

August 5, 2005

Ms. Delrae Erickson  
Exchange Bank  
444 Aviation Boulevard  
Santa Rosa, CA 95403

**Re: Quarterly Groundwater Monitoring Report – Second Quarter 2005, Former Exchange Bank, 330 Sebastopol Road, Santa Rosa, California, NCRWQCB Case No. 1TSO089**

Dear Ms. Erickson:

This report presents Winzler & Kelly Consulting Engineers' (Winzler & Kelly's) results of groundwater monitoring and sampling activities performed for the second quarter 2005, at the Former Exchange Bank (site) located at 330 Sebastopol Road, Santa Rosa, California (Figures 1 and 2).

#### **GROUNDWATER MONITORING AND SAMPLING ACTIVITIES**

The Site-Specific Sampling Procedures, provided in Appendix A, describe in detail all of the monitoring and sampling activities that were performed at the site on June 15 and 16, 2005. A brief summary of these activities is also provided below.

#### **FIELD ACTIVITIES**

**Personnel Present:** Winzler & Kelly's Environmental Engineer, Pon Xayasaeng, performed the groundwater monitoring and sampling activities.

**Dissolved Oxygen:** Dissolved oxygen (DO) concentrations were measured on June 15, 2005, in monitoring wells M-1 through M-4, M-6, and M-7. The measurements were obtained using a calibrated DO meter while the biosparge system was operating.

**Biosparge Shutdown:** The biosparge system was shutdown on June 15, 2005, after DO measurements had been obtained. The biosparge system was shutdown in order to allow groundwater levels to equilibrate.

**Depth-to-Water:** The depth-to-groundwater was measured on June 16, 2005, in monitoring wells M-1 through M-4, M-6, and M-7. The measurements were obtained using an electronic water level meter.

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**Purging:** Purging of each monitoring well sampled on June 16, 2005, was performed using an electronic 12-volt 1.5-inch submersible pump. A copy of each well sampling data sheet is provided in Appendix B.

**Monitoring Well Sampling:** Groundwater samples were collected on June 16, 2005, from monitoring wells M-1, M-3, M-4, and M-6. The groundwater samples were collected using new disposable bailers, which were used to transfer groundwater into the appropriate laboratory-supplied, certified clean sample containers.

**Chemical Analysis:** Analytical Sciences Laboratory (Analytical Sciences) of Petaluma, California (a California-certified laboratory) analyzed the June 16, 2005 groundwater samples for total petroleum hydrocarbons as gasoline (TPH-G) by EPA Method 8015M, and for benzene, toluene, ethyl benzene, and total xylenes (BTEX), oxygenated fuel additives, and lead scavengers by EPA Method 8260B. In addition, groundwater samples collected from monitoring well M-6 for analyzed for colorimetric phosphate and for Nitrate as Nitrate by EPA 300 (IC).

## SECOND QUARTER 2005 GROUNDWATER MONITORING RESULTS

The groundwater elevations and flow direction data are presented in Tables 1 and 2, respectively. A groundwater contour map, illustrating the groundwater elevation contours at the site on June 16, 2005, is provided as Figure 3. As Figure 3 shows, the groundwater flow on June 16, 2005, was toward the south at an approximate gradient of 0.005 ft/ft.

The DO concentrations measured on June 15, 2005, in monitoring wells M-1 and M-6 indicate that the biosparge system is effectively introducing oxygen into the aquifer near these wells. The results are summarized in Table 3.

Nutrient monitoring was first performed on March 31, 2004, in monitoring wells M-2, M-3, M-6, and M-7. The purpose of the initial monitoring was to provide baseline concentrations prior to proposed nutrient injections. The analytical results of the samples collected on March 31, 2004, indicated the presence of Nitrate as Nitrate at concentrations of 26 and 150 mg/L in monitoring wells M-6 and M-7, respectively.

The first and only nutrient injection was performed on May 25, 2004, in sparge points SP-9 through SP-11. Nutrient monitoring has continued on a quarterly basis in select monitoring wells and on June 16, 2005, was conducted on only the samples collected from monitoring well M-6. The analytical results of the groundwater sample collected on June 16, 2005, from M-6 indicated the presence of Nitrate as Nitrate at a concentration of 34 mg/L. Phosphate was not detected in the samples. The results are summarized in Table 3. The parameters of pH, conductivity, and

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temperature that were monitored during purging of the groundwater wells are also summarized in Table 3.

Groundwater sampling has indicated that the only remaining residual contamination at the site is located near monitoring wells M-1 and M-6. TPH-G is the only constituent that has been detected above the Regional Water Board's Water Quality Objectives in five of the last six quarters in monitoring well M-6. Constituents of concern (with the exception of TPH-G) have been below the Regional Water Board's Water Quality Objectives since May of 2002 in well M-1. In addition, the analytical results of groundwater samples from monitoring well M-1 have indicated that detections in this well occur seasonally when groundwater elevation is highest. The concentrations detected in both of these wells on June 16, 2005, have decreased significantly since work at the site was initiated. For example, the analytical results have demonstrated a 99 percent decrease in TPH-G concentrations in monitoring well M-1 between the first sampling event in 1992 and June 2005, and a 90 percent decrease in TPH-G concentrations in monitoring well M-6 between 1997 and June 2005.

The analysis of the groundwater samples collected from M-3 and M-4 on June 16, 2005, did not detect the presence of any gasoline related contaminants above the laboratory's detection limits. This is consistent with previous analytical results dating back four years in monitoring well M-3, and three years in monitoring well M-4. The analytical results are summarized in Table 4. A summary of the analytical results of TPH-G, benzene, and MTBE on June 16, 2005, is also provided on Figure 4.

The laboratory QA/QC included the use of method blanks to exclude false-positive analyses and the use of laboratory control samples to evaluate the percentage recovery of known analyte spikes. The recovery percentages for all of the sample analytes were within acceptable ranges. The complete laboratory report, QA/QC data, and the chain-of-custody form for the groundwater samples are included in Appendix C.

## GEOTRACKER DATA ENTRY

Winzler & Kelly has submitted the EDF report and the groundwater well measurement file for the June 16, 2005 monitoring event to the GeoTracker database. Winzler & Kelly also submitted a revised map showing the most current site conditions. Copies of submittal verifications are included in Appendix D. Winzler & Kelly will submit a PDF copy of this report upon completion.

## GROUNDWATER DISPOSAL

Winzler & Kelly contracted with Clearwater Environmental for the June 22, 2005, disposal of 200 gallons of purge water drummed at the site. Clearwater Environmental transported the purge water to Alviso Independent Oil for recycling. A copy of the non-hazardous waste manifest is included in Appendix E.

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## RECOMMENDATIONS

Winzler & Kelly will continue to perform quarterly groundwater monitoring and sampling activities at the site. The third quarter 2005 monitoring and sampling event is scheduled for September 2005.

Should you have any questions or comments regarding this project, please contact Elizabeth Cargay, Project Manager, at (707) 523-1010.

Sincerely,  
WINZLER & KELLY



Pon Xayasaeng  
Environmental Engineer



Kent O'Brien, RG, CEG  
Senior Project Geologist



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Attachments

### Figures:

- Figure 1 – Location Map
- Figure 2 – Site Plan
- Figure 3 – Groundwater Contour Map
- Figure 4 – Petroleum Hydrocarbon Concentrations in Groundwater

### Tables:

- Table 1 – Water Level Data and Well Construction Detail
- Table 2 – Groundwater Gradient and Flow Direction
- Table 3 – DO, Nutrients, and Indicator Parameters
- Table 4 – Analytical Results of Groundwater Monitoring Well Samples

### Appendices:

- Appendix A – Site-Specific Sampling Procedures
- Appendix B – Well Sampling Data Sheets
- Appendix C – Analytical Laboratory Report
- Appendix D – GeoTracker Upload Verifications
- Appendix E – Waste Manifest

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c: Ms. Colleen Stone, North Coast Regional Water Quality Control Board, 5550 Skylane Boulevard, Suite A, Santa Rosa, CA 95403  
Mr. Carl Merner, Merner Land Company, P.O. Box 3468, Santa Rosa, CA 95402  
Mr. William Manly, 2750 Corby Avenue, Santa Rosa, CA 95407

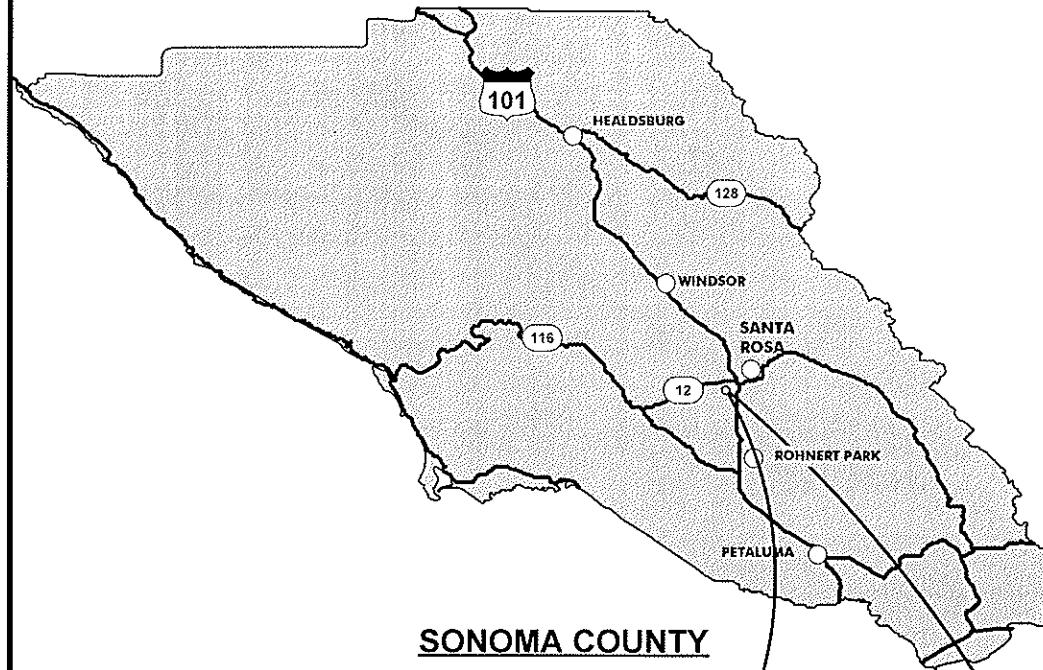
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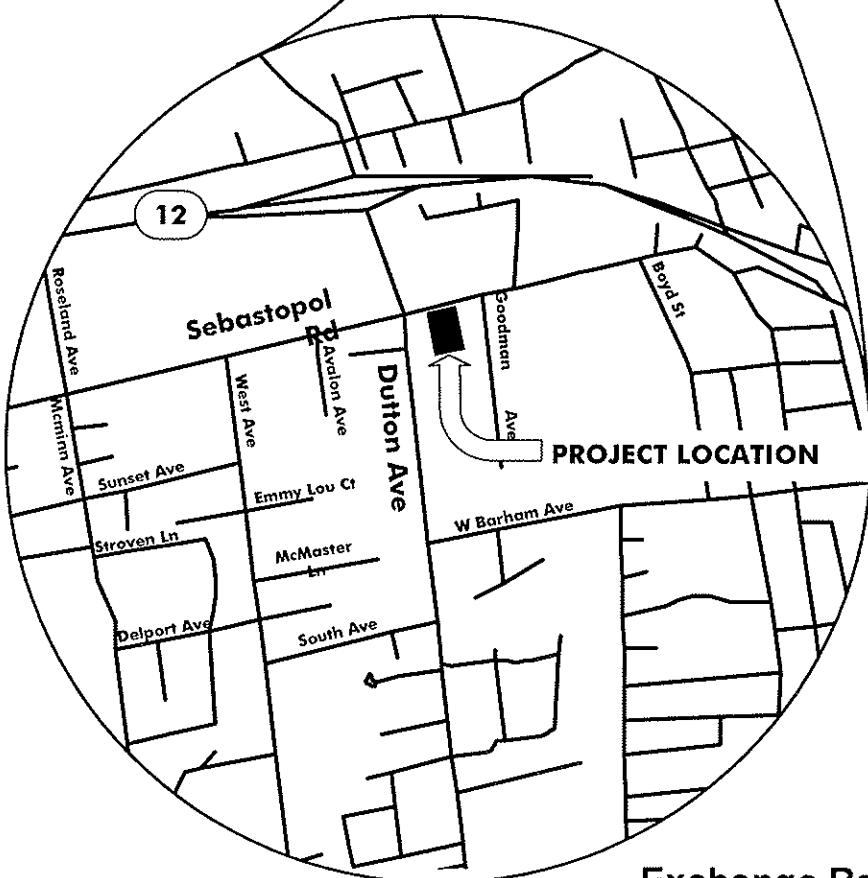
## **Figures**



NOT TO SCALE



**SONOMA COUNTY**



**LOCATION MAP**

Exchange Bank Data Center  
330 Sebastopol Road  
Santa Rosa, CA

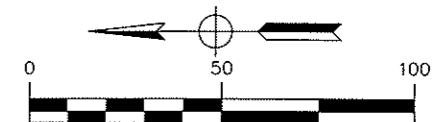
\* DW-437



# **FORMER EXCHANGE BANK SITE PLAN**

## FIGURE 2

\* DW-437 ●



## LEGEND

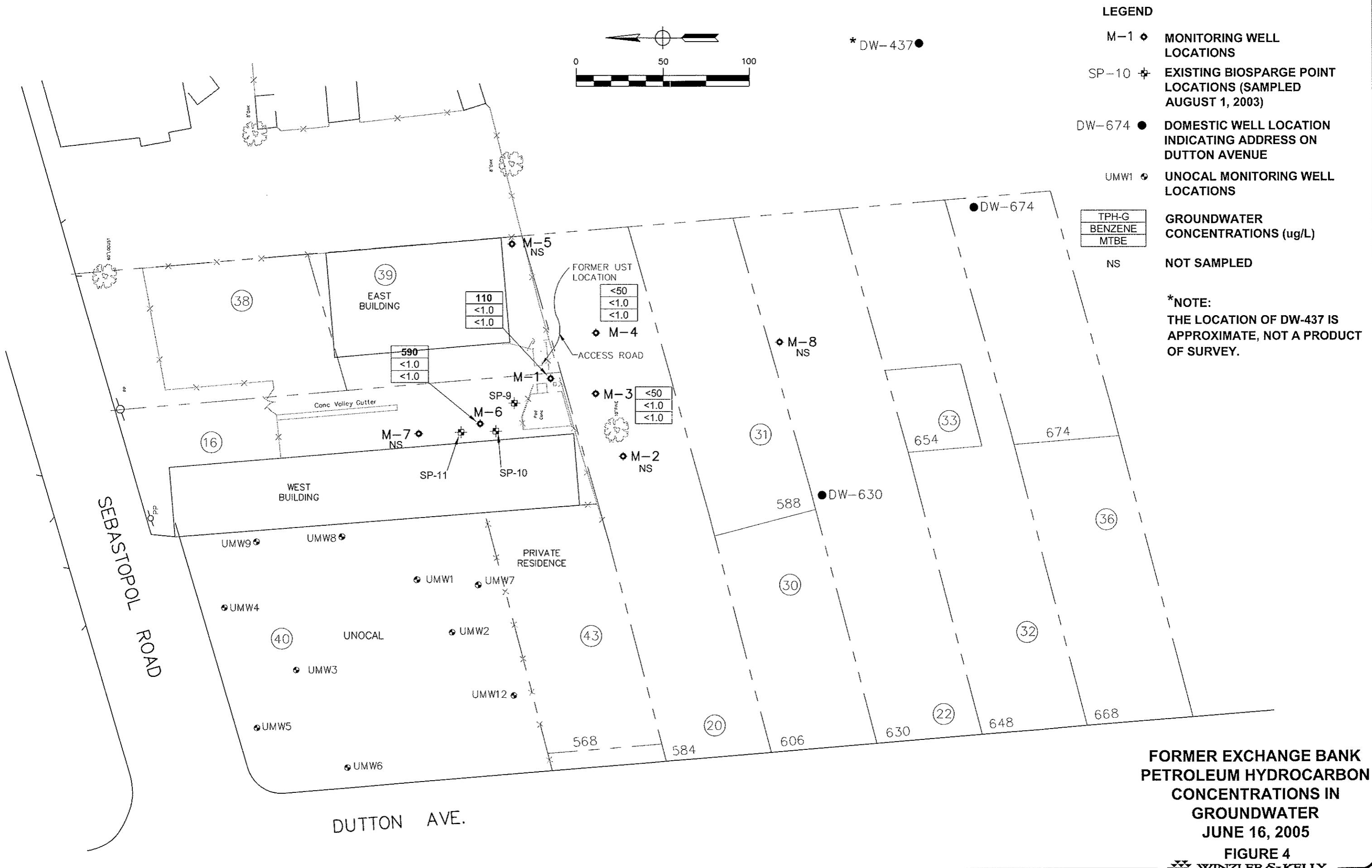
- M-1 ◊ MONITORING WELL LOCATIONS
- DW-674 ● DOMESTIC WELL LOCATION INDICATING ADDRESS ON DUTTON AVENUE
- UMW1 ◊ UNOCAL MONITORING WELL LOCATIONS
- (136.22) GROUNDWATER ELEVATION
- GROUNDWATER CONTOUR
- - - ? DASHED WHERE APPROX. QUERIED WHERE UNKNOWN

\*NOTE:  
THE LOCATION OF DW-437 IS APPROXIMATE, NOT A PRODUCT OF SURVEY.



FORMER EXCHANGE BANK  
GROUNDWATER CONTOUR MAP  
JUNE 16, 2005

FIGURE 3



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## **Tables**

**Table 1. Water Level Data and Well Construction Detail**

Former Exchange Bank Site  
330 Sebastopol Road, Santa Rosa, CA

Well ID	Date	Groundwater Elevation	Depth-to-Water	Top of Casing Elevation (Mean Sea Level)	Free Product Thickness	Screen Interval	Sand Pack Interval	Bentonite/ Grout Interval					
								feet					
M-1	12/29/1992	137.23	7.73	144.96	NM	4" Well 10 - 25 0.020"	9 - 25 #3 sand	0 - 9					
	1/27/1993	139.26	5.70										
	12/11/1993	134.67	10.29										
	5/13/1994	135.31	9.65										
	9/17/1994	131.04	13.92										
	10/26/1994	130.29	14.67										
	12/17/1994	136.09	8.87										
	3/18/1995	140.07	4.89										
	6/24/1995	135.37	9.59										
	9/23/1995	132.38	12.58										
	12/16/1995	135.74	9.22										
	3/23/1996	137.68	7.28										
	6/20/1996	135.45	9.51										
	3/12/1997	136.49	8.47										
	6/26/1997	133.65	11.31										
	12/18/1997	137.10	7.86										
	1/29/1998	139.71	5.25										
	2/27/1998	141.27	3.69										
	3/18/1998	139.41	5.55										
	4/9/1998	138.54	6.42										
	5/29/1998	139.15	5.81										
	6/18/1998	136.38	8.58										
	7/22/1998	135.01	9.95										
	8/26/1998	133.83	11.13										
	9/16/1998	133.16	11.80										
	10/20/1998	132.48	12.48										
	11/19/1998	133.39	11.57										
	12/30/1998	135.19	9.77										
	3/18/1999	138.83	6.13										
	6/16/1999	134.97	9.99										
	9/23/1999	131.96	13.00										
	12/29/1999	132.96	12.00										
	8/31/2000	132.49	12.47										
	10/17/2000	System start-up on 10-17-00											
	10/25/2002	131.38	13.58										
	11/13/2000	System down due to compressor failure											
	12/6/2000	System restart											
	12/20/2000	133.39	11.57										
	3/15/2001	137.93	7.03										
	6/14/2001	133.71	11.25										
	9/18/2001	130.94	14.02										
	11/13/2001	133.23	11.73										
	12/11/2001	138.04	6.92										
	1/15/2002	140.14	4.82										
	2/12/2002	137.65	7.31										
	3/12/2002	138.32	6.64										
	4/16/2002	136.17	8.79										
	5/14/2002	135.26	9.7										
	6/11/2002	134.47	10.49										
	6/19/2002	System down from 6/19/02 to 8/9/02 due to compressor piston failure.											
	7/16/2002	132.89	12.07										
	8/9/2002	NA	NA										
	8/13/2002	132.21	12.75										
	12/12/2002	133.65	11.31										
	3/12/2003	137.01	7.95										
	6/11/2003	135.66	9.30										
	9/10/2003	132.51	12.45										
	10/9/2003	System Expansion Startup											
	1/20/2004 *	138.46	6.50										
	3/31/2004	137.25	7.71										
	7/16/2004	133.01	11.95										
	9/15/2004	131.51	13.45										
	12/14/2004	135.16	9.80										
	3/24/2005	139.12	5.84										
	6/16/2005	136.22	8.74										

**Table 1. Water Level Data and Well Construction Detail**

Former Exchange Bank Site  
330 Sebastopol Road, Santa Rosa, CA

Well ID	Date	Groundwater Elevation	Depth-to-Water	Top of Casing Elevation (Mean Sea Level)	Free Product Thickness	Screen Interval	Sand Pack Interval	Bentonite/ Grout Interval					
								feet					
M-2	5/13/1994	135.23	8.10	143.33	NM	2" Well 5 - 20 0.020"	#2/12 4 - 20	0 - 4					
	9/17/1994	132.16	11.17										
	9/17/1994	132.16	11.17										
	12/17/1994	135.93	7.40										
	6/24/1995	135.27	8.06										
	9/23/1995	132.44	10.89										
	12/16/1995	135.37	7.96										
	3/23/1996	137.40	5.93										
	6/20/1996	135.36	7.97										
	3/12/1997	136.29	7.04										
	6/26/1997	133.60	9.73										
	12/17/1997	136.88	6.45										
	1/29/1998	139.11	4.22										
	2/27/1998	140.79	2.54										
	3/17/1998	138.93	4.40										
	4/9/1998	138.12	5.21										
	5/29/1998	137.04	6.29										
	6/19/1998	136.22	7.11										
	7/22/1998	134.97	8.36										
	8/26/1998	133.75	9.58										
	9/16/1998	133.13	10.20										
	10/20/1998	132.47	10.86										
	11/19/1998	133.26	10.07										
	12/30/1998	135.13	8.20										
	3/18/1999	138.39	4.94										
	6/16/1999	134.89	8.44										
	9/23/1999	131.96	11.37										
	12/23/1999	132.95	10.38										
	8/31/2000	132.47	10.86										
	10/17/2000	System start-up											
	10/25/2000	131.49	11.84										
	11/13/2000	System down due to compressor failure											
	12/6/2000	System restart											
	12/20/2000	133.21	10.12										
	3/15/2001	137.49	5.84										
	6/14/2001	133.71	9.62										
	9/18/2001	131.08	12.25										
	11/13/2001	132.21	11.12										
	12/11/2001	137.73	5.60										
	1/15/2002	139.56	3.77										
	2/12/2002	137.16	6.17										
	3/12/2002	137.70	5.63										
	4/16/2002	136.02	7.31										
	5/14/2002	135.17	8.16										
	6/11/2002	134.44	8.89										
	6/19/2002	System down from 6/19/02 to 8/9/02 due to compressor piston failure.											
	7/16/2002	133.03	10.30										
	8/13/2002	132.53	10.80										
	12/12/2002	132.35	10.98										
	3/12/2003	136.68	6.65										
	6/11/2003	135.58	7.75										
	9/10/2003	132.68	10.65										
	10/9/2003	System Expansion Startup											
	1/20/2004 *	138.05	5.28										
	3/31/2004	136.84	6.49										
	7/16/2004	133.04	10.29										
	9/15/2004	131.63	11.70										
	12/14/2004	134.87	8.46										
	3/24/2005	138.45	4.88										
	6/16/2005	136.04	7.29										

**Table 1. Water Level Data and Well Construction Detail**

Former Exchange Bank Site  
330 Sebastopol Road, Santa Rosa, CA

Well ID	Date	Groundwater Elevation	Depth-to-Water	Top of Casing Elevation (Mean Sea Level)	Free Product Thickness	Screen Interval	Sand Pack Interval	Bentonite/ Grout Interval
								feet
M-3	2/27/1997	---	---	143.46	NM	2" Well 5 - 20 0.020"	#2/12 4 - 20	0 - 4
	3/13/1997	136.33	7.13					
	6/27/1997	133.60	9.86					
	12/18/1997	136.92	6.54					
	1/29/1998	139.58	3.88					
	2/27/1998	140.93	2.53					
	3/17/1998	139.03	4.43					
	4/9/1998	138.20	5.26					
	5/29/1998	137.34	6.12					
	6/18/1998	136.25	7.21					
	7/22/1998	134.96	8.50					
	8/26/1998	133.76	9.70					
	9/16/1998	133.12	10.34					
	10/20/1998	132.48	10.98					
	11/19/1998	133.27	10.19					
	12/30/1998	135.15	8.31					
	3/18/1999	138.48	4.98					
	6/16/1999	134.90	8.56					
	9/23/1999	131.96	11.50					
	12/23/1999	132.97	10.49					
	8/31/2000	132.48	10.98					
	10/17/2000	System start-up						
	10/25/2000	131.47	11.99					
	11/13/2000	System down due to compressor failure						
	12/6/2000	System restart						
	12/20/2000	133.23	10.23					
	3/15/2001	137.54	5.92					
	6/14/2001	133.61	9.85					
	9/18/2001	131.04	12.42					
	11/13/2001	132.32	11.14					
	12/11/2001	137.75	5.71					
	1/15/2002	139.66	3.80					
	2/12/2002	137.21	6.25					
	3/12/2002	137.78	5.68					
	4/16/2002	136.03	7.43					
	5/14/2002	135.17	8.29					
	6/11/2002	134.43	9.03					
	6/19/2002	System down from 6/19/02 to 8/9/02 due to compressor piston failure.						
	7/16/2002	133.02	10.44					
	8/13/2002	132.50	10.96					
	12/12/2002	132.41	11.05					
	3/12/2003	136.73	6.73					
	6/11/2003	135.58	7.88					
	9/10/2003	132.67	10.79					
	10/9/2003	System Expansion Startup						
	1/20/2004 *	138.14	5.32					
	3/31/2004	136.89	6.57					
	7/16/2004	133.05	10.41					
	9/15/2004	131.60	11.86					
	12/14/2004	134.87	8.59					
	3/24/2005	138.56	4.90					
	6/16/2005	136.05	7.41					

**Table 1. Water Level Data and Well Construction Detail**

Former Exchange Bank Site  
330 Sebastopol Road, Santa Rosa, CA

Well ID	Date	Groundwater Elevation	Depth-to-Water	Top of Casing Elevation (Mean Sea Level)	Free Product Thickness	Screen Interval	Sand Pack Interval	Bentonite/ Grout Interval					
								feet					
M-4	3/12/1997	136.43	7.49	143.92	NM	2" Well 5 - 15 0.020"	#2/12 4 - 15	0 - 4					
	6/27/1997	133.67	10.25										
	12/20/1997	137.01	6.91										
	1/29/1998	139.56	4.36										
	2/27/1998	141.11	2.81										
	3/18/1998	139.20	4.72										
	4/9/1998	138.36	5.56										
	5/29/1998	137.73	6.19										
	6/19/1998	136.35	7.57										
	7/22/1998	135.02	8.90										
	8/26/1998	133.84	10.08										
	9/16/1998	133.21	10.71										
	10/21/1998	132.58	11.34										
	11/19/1998	133.39	10.53										
	12/30/1998	135.22	8.70										
	3/18/1999	138.67	5.25										
	6/16/1999	134.98	8.94										
	9/23/1999	132.07	11.85										
	12/29/1999	133.07	10.85										
	8/31/2000	132.58	11.34										
	10/17/2000	System start-up on 10-17-00											
	10/25/2000	130.60	13.32										
	11/13/2000	System down due to compressor failure											
	12/6/2000	System restart											
	12/20/2000	133.41	10.51										
	3/15/2001	137.77	6.15										
	6/14/2001	133.77	10.15										
	9/18/2001	131.22	12.70										
	11/13/2001	132.78	11.14										
	12/11/2001	137.91	6.01										
	1/15/2002	139.90	4.02										
	2/12/2002	137.52	6.40										
	3/12/2002	138.12	5.80										
	4/16/2002	136.21	7.71										
	5/14/2002	135.29	8.63										
	6/11/2002	134.51	9.41										
	6/19/2002	System down from 6/19/02 to 8/9/02 due to compressor piston failure.											
	7/16/2002	133.13	10.79										
	8/13/2002	132.60	11.32										
	12/12/2002	132.91	11.01										
	3/12/2003	136.96	6.96										
	6/11/2003	135.69	8.23										
	9/10/2003	132.74	11.18										
	10/9/2003	System Expansion Startup											
	1/20/2004 *	138.37	5.55										
	3/31/2004	137.14	6.78										
	7/16/2004	133.16	10.76										
	9/15/2004	131.76	12.16										
	12/14/2004	135.09	8.83										
	3/24/2005	138.85	5.07										
	6/16/2005	136.23	7.69										

**Table 1. Water Level Data and Well Construction Detail**

Former Exchange Bank Site  
330 Sebastopol Road, Santa Rosa, CA

Well ID	Date	Groundwater Elevation	Depth-to-Water	Top of Casing Elevation (Mean Sea Level)	Free Product Thickness	Screen Interval	Sand Pack Interval	Bentonite/ Grout Interval
								feet
M-5	3/12/1997	136.60	8.26	144.86	NM	2" Well 5 - 20 0.020"	#2/12 4 - 20	0 - 4
	6/26/1997	133.75	11.11					
	12/17/1997	137.07	7.79					
	1/29/1998	139.90	4.96					
	2/27/1998	141.48	3.38					
	3/17/1998	139.44	5.42					
	4/9/1998	138.57	6.29					
	5/29/1998	137.27	7.59					
	6/18/1998	136.52	8.34					
	7/22/1998	135.14	9.72					
	8/26/1998	133.93	10.93					
	9/16/1998	133.31	11.55					
	10/20/1998	132.65	12.21					
	11/19/1998	133.42	11.44					
	12/30/1998	135.29	9.57					
	3/18/1999	138.89	5.97					
	6/16/1999	135.05	9.81					
	9/23/1999	132.18	12.68					
	12/23/1999	133.12	11.74					
	8/31/2000	132.66	12.20					
	10/17/2000	System start-up						
	10/25/2000	131.77	13.09					
	11/13/2000	System down due to compressor failure						
	12/6/2000	System restart						
	12/20/2000	133.40	11.46					
	3/15/2001	137.87	6.99					
	6/14/2001	133.84	11.02					
	9/18/2001	131.48	13.38					
	11/13/2001	132.84	12.02					
	12/11/2001	138.01	6.85					
	1/15/2002	140.10	4.76					
	2/12/2002	137.54	7.32					
	3/12/2002	138.03	6.83					
	4/16/2002	136.31	8.55					
	5/14/2002	135.36	9.50					
	6/11/2002	134.61	10.25					
	6/19/2002	System down from 6/19/02 to 8/9/02 due to compressor piston failure.						
	7/16/2002	133.23	11.63					
	8/13/2002	132.65	12.21					
	12/12/2002	132.73	12.13					
	3/12/2003	137.02	7.84					
	6/11/2003	135.83	9.03					
	9/10/2003	132.84	12.02					
	10/9/2003	System Expansion Startup						
	1/20/2004 *	138.46	6.40					
	3/31/2004	NM	NM					
	7/16/2004	133.25	11.61					
	9/15/2004	NM	NM					

**Table 1. Water Level Data and Well Construction Detail**

Former Exchange Bank Site  
330 Sebastopol Road, Santa Rosa, CA

Well ID	Date	Groundwater Elevation	Depth-to-Water	Top of Casing Elevation (Mean Sea Level)	Free Product Thickness	Screen Interval	Sand Pack Interval	Bentonite/ Grout Interval
								feet
M-6	3/12/1997	136.79	7.89	144.68	NM	2" Well 5 - 20 0.020"	#2/12 4 - 20	0 - 4
	6/26/1997	133.61	11.07					
	12/18/1997	136.97	7.71					
	1/29/1998	139.58	5.10					
	2/27/1998	141.27	3.41					
	3/18/1998	139.46	5.22					
	4/9/1998	138.57	6.11					
	5/29/1998	137.47	7.21					
	6/18/1998	136.47	8.21					
	7/22/1998	135.03	9.65					
	8/26/1998	133.79	10.89					
	9/16/1998	133.09	11.59					
	10/20/1998	131.41	13.27					
	11/19/1998	133.25	11.43					
	12/30/1998	135.13	9.55					
	3/18/1999	138.88	5.80					
	6/16/1999	134.96	9.72					
	9/23/1999	131.86	12.82					
	12/29/1999	132.80	11.88					
	8/31/2000	132.41	12.27					
	10/17/2000	System start-up						
	10/25/2000	131.36	13.32					
	11/13/2000	System down due to compressor failure						
	12/6/2000	System restart						
	12/20/2000	133.15	11.53					
	3/15/2001	137.75	6.93					
	6/14/2001	133.60	11.08					
	9/18/2001	130.99	13.69					
	11/13/2001	132.34	12.34					
	12/11/2001	137.59	7.09					
	1/15/2002	140.08	4.60					
	2/12/2002	137.64	7.04					
	3/12/2002	137.93	6.75					
	4/16/2002	136.29	8.39					
	5/14/2002	135.26	9.42					
	6/11/2002	134.37	10.31					
	6/19/2002	System down from 6/19/02 to 8/9/02 due to compressor piston failure.						
	7/16/2002	132.91	11.77					
	8/13/2002	132.15	12.53					
	12/12/2002	132.32	12.36					
	3/12/2003	137.10	7.58					
	6/11/2003	135.75	8.93					
	9/10/2003	132.45	12.23					
	10/9/2003	System Expansion Startup						
	1/20/2004 *	138.35	6.33					
	3/31/2004	137.35	7.33					
	7/16/2004	132.99	11.69					
	9/15/2004	131.45	13.23					
	12/14/2004	134.82	9.86					
	3/24/2005	138.82	5.86					
	6/16/2005	136.43	8.25					

**Table 1. Water Level Data and Well Construction Detail**

Former Exchange Bank Site  
330 Sebastopol Road, Santa Rosa, CA

Well ID	Date	Groundwater Elevation	Depth-to-Water	Top of Casing Elevation (Mean Sea Level)	Free Product Thickness	Screen Interval	Sand Pack Interval	Bentonite/ Grout Interval
								feet
M-7	3/12/1997	136.73	8.07	144.80	NM	2" Well 5 - 20 0.020"	#2/12 4 - 20	0 - 4
	6/26/1997	133.55	11.25					
	12/17/1997	136.97	7.83					
	1/29/1998	139.42	5.38					
	2/27/1998	141.21	3.59					
	3/17/1998	139.42	5.38					
	4/9/1998	138.56	6.24					
	5/29/1998	137.42	7.38					
	6/18/1998	136.22	8.58					
	7/22/1998	135.00	9.80					
	8/26/1998	133.76	11.04					
	9/16/1998	133.07	11.73					
	10/20/1998	132.33	12.47					
	11/19/1998	133.20	11.60					
	12/30/1998	135.11	9.69					
	3/18/1999	138.86	5.94					
	6/16/1999	134.95	9.85					
	9/23/1999	131.79	13.01					
	12/23/1999	132.73	12.07					
	8/31/2000	132.34	12.46					
	10/17/2000	System start-up						
	10/25/2000	131.31	13.49					
	11/13/2000	System down due to compressor failure						
	12/6/2000	System restart						
	12/20/2000	133.13	11.67					
	3/15/2001	137.72	7.08					
	6/14/2001	133.58	11.22					
	9/18/2001	130.98	13.82					
	11/13/2001	132.50	12.30					
	12/11/2001	137.56	7.24					
	1/15/2002	139.89	4.91					
	2/12/2002	137.65	7.15					
	3/12/2002	137.93	6.87					
	4/16/2002	136.30	8.50					
	5/14/2002	135.23	9.57					
	6/11/2002	134.33	10.47					
	6/19/2002	System down from 6/19/02 to 8/9/02 due to compressor piston failure.						
	7/16/2002	132.86	11.94					
	8/13/2002	132.09	12.71					
	12/12/2002	132.27	12.53					
	3/12/2003	137.09	7.71					
	6/11/2003	135.73	9.07					
	9/10/2003	132.41	12.39					
	10/9/2003	System Expansion Startup						
	1/20/2004 *	138.26	6.54					
	3/31/2004	137.32	7.48					
	7/16/2004	132.95	11.85					
	9/15/2004	131.40	13.40					
	12/14/2004	134.85	9.95					
	3/24/2005	138.74	6.06					
	6/16/2005	136.43	8.37					

**Table 1. Water Level Data and Well Construction Detail**

Former Exchange Bank Site  
330 Sebastopol Road, Santa Rosa, CA

Well ID	Date	Groundwater Elevation	Depth-to-Water	Top of Casing Elevation (Mean Sea Level)	Free Product Thickness	Screen Interval	Sand Pack Interval	Bentonite/ Grout Interval					
								feet					
M-8	7/22/1998	135.08	7.73	142.81	NM	2" Well 3.75 - 18 0.020"	#2/12 3 - 18	0 - 3					
	8/27/1998	133.88	8.93										
	9/16/1998	133.29	9.52										
	10/20/1998	132.62	10.19										
	11/19/1998	133.40	9.41										
	12/30/1998	135.30	7.51										
	3/18/1999	138.58	4.23										
	6/16/1999	135.02	7.79										
	9/23/1999	132.11	10.70										
	12/29/1999	133.11	9.70										
	8/31/2000	132.61	10.20										
	10/17/2000	System start-up											
	10/25/2000	131.65	11.16										
	12/20/2000	133.36	9.45										
	3/15/2001	137.60	5.21										
	4/23/2001**	1.74" (0.145 ft) cutoff the top-of-casing, so lid could be properly secured.		142.67	NM	2" Well 3.75 - 18 0.020"	#2/12 3 - 18	0 - 3					
		Well has not been resurveyed.											
	6/14/2001	133.78	8.89										
	9/18/2001	131.18	11.49										
	11/13/2001	132.19	10.48										
	12/11/2001	137.78	4.89										
	1/15/2002	139.58	3.09										
	2/12/2002	137.22	5.45										
	3/12/2002	137.82	4.85										
	4/16/2002	136.07	6.60										
	5/14/2002	135.28	7.39										
	6/11/2002	134.54	8.13										
	6/19/2002	System down from 6/19/02 to 8/9/02 due to compressor piston failure.											
	7/16/2002	133.14	9.53										
	8/13/2002	132.65	10.02										
	12/12/2002	132.44	10.23										
	3/12/2003	136.75	5.92										
	6/11/2003	135.65	7.02										
	9/10/2003	132.84	9.83										
	10/9/2003	System Expansion Startup											
	1/20/2004	NM	NM										
	3/31/2004	NM	NM										
	7/16/2004	NM	NM										
	9/15/2004	NM	NM										

**Notes:**

\* = The depth-to-groundwater measurements collected on 1/20/04 were obtained while the biosparge system was operating.

\*\* = This table reflects the corrected groundwater elevations measured in MW-8 from 6/14/2001 to the present. The elevations are based on the adjusted TOC elevation that was a result of casing cutting on 4/23/2001.

NM = Not measured

**Table 2. Groundwater Gradient and Flow Direction**

Former Exchange Bank Site  
330 Sebastopol Road, Santa Rosa, CA

Date	Groundwater Gradient in ft/ft	Flow Direction from the Tank Area
6/25/1997	0.001	Northwest to Southwest
12/17/1998	0.003	Northwest to Southwest
1/29/1998	0.010	Northwest to Southwest
2/27/1998	0.011	Southwest
3/17/1998	0.014	Southwest to South-Southeast
4/4/1998	0.007	Southwest to South-Southeast
5/29/1998	0.011	Southwest and Northeast
6/18/1998	0.003	Southwest
7/22/1998	0.002	Southwest
8/26/1998	0.002	West to Southwest
9/16/1998	0.002	Northwest
10/20/1998	0.023	Northwest
11/20/1998	0.002	Northwest to Southwest
12/30/1998	0.002	Northwest to West
3/18/1999	0.006	Southwest to West
6/16/1999	0.002	Southwest to Northwest
9/23/1999	0.002	Northwest
12/23/1999	0.002	North 62° West
8/30/2000	0.002	North 71° West
10/25/2000	0.001	North 58° West
12/20/2000	0.002	North 75° West
3/15/2001	0.003	South 59° West
6/14/2001	0.002	North 73° West
9/18/2001	0.004	North 88° West
11/13/2001	0.005	North 62° West
12/11/2001	0.003	North 84° West
1/15/2002	0.004	South 45° West
2/12/2002	0.004	South 24° West
3/12/2002	0.003	South 62° West
4/16/2002	0.002	South 44° East
5/14/2002	0.001	South 87° East
6/11/2002	0.002	North 75° West
7/16/2002	0.003	North 71° West
8/13/2002	0.004	North 53° West
12/12/2002	0.004	West-Northwest
3/12/2003	0.005	West-Southwest
6/11/2003	0.004	West
9/10/2003	0.005	Northwest
3/31/2004	0.007	North-Northeast
7/16/2004	0.002	Northwest
9/15/2004	0.006	Northwest
12/14/2004	0.008	Northwest
3/24/2005	0.010	Northwest
6/16/2005	0.005	South

**Table 3. DO, Nutrients, and Indicator Parameters**

Former Exchange Bank Site  
330 Sebastopol Road, Santa Rosa, CA

Well ID	Sample Date	Dissolved Oxygen	Phosphate	Nitrate as Nitrate	pH	Conductivity	Temperature
		mg/L				uS/cm	°F
M-1	4/23/2002	11.43	<5	<5	NA	NA	NA
	5/14/2002	NA	NA	NA	7.77	565	63.8
	8/12/2002	10.90	NA	NA	NA	NA	NA
	8/13/2002	NA	NA	NA	7.16	412	72.5
	12/11/2002	10.01	NA	NA	NA	NA	NA
	12/12/2002	NA	NA	NA	7.33	416	63.2
	3/11/2003	10.93	NA	NA	NA	NA	61.0
	3/12/2003	NA	NA	NA	7.5	376	61.7
	6/11/2003	11.20	NA	NA	7.69	385	61.2
	9/10/2003	NA	NA	NA	7.78	388	64.2
	1/20/2004	2.94	NA	NA	NA	NA	NA
	3/30/2004	12.83	NA	NA	NA	NA	NA
	3/31/2004	NA	NA	NA	7.10	399	59.9
	7/1/2004	11.07	NA	NA	NA	NA	NA
	7/16/2004	NA	NA	NA	7.37	436	63.9
	9/14-15/2004	8.57	NA	NA	7.92	408	64.9
	12/13-14/2004	9.88	NA	NA	7.35	561	63.9
	3/22-24/2005	10.46	NA	NA	7.16	364	58.5
	6/15-16/2005	11.47	NA	NA	7.29	324	62.3
M-2	4/23/2002	1.13	<2.5	<5	NA	NA	NA
	5/14/2002	NA	NA	NA	7.65	361	64.0
	8/12/2002	0.79	NA	NA	NA	NA	NA
	8/13/2002	NA	NA	NA	6.69	390	62.7
	12/11/2002	1.57	NA	NA	NA	NA	NA
	3/11/2003	2.08	NA	NA	NA	NA	59.7
	3/12/2003	NA	NA	NA	8.23	309	60.5
	6/11/2003	0.91	NA	NA	NA	NA	NA
	1/20/2004	2.16	NA	NA	NA	NA	NA
	3/30/2004	<b>Well not accessible - car parked on top.</b>					
	3/31/2004	NA	<1.0	9.3	6.55 / 6.83 *	367	60.3
	7/1/2004	0.78	NA	NA	NA	NA	NA
	7/16/2004	NA	<0.5	5.9	6.7/7.04 *	396	63.7
	9/14-15/2004	1.23	<2.0	11	6.73/6.83 *	509	65.3
	12/13-14/2004	0.93	<0.50	8.0	6.41/6.64 *	456	64.4
	3/22-24/2005	1.99	<0.50	10	6.70	378	60.3
	6/15-16/2005	2.46	NA	NA	NA	NA	NA
M-3	4/23/2002	10.55	5	<5	NA	NA	NA
	5/14/2002	NA	NA	NA	7.72	300	66.4
	8/12/2002	5.71	NA	NA	NA	NA	NA
	8/13/2002	NA	NA	NA	6.62	302	62.6
	12/11/2002	8.50	NA	NA	NA	NA	NA
	12/12/2002	NA	NA	NA	7.29	276	64.3
	3/11/2003	10.00	NA	NA	NA	NA	60.6
	3/12/2003	NA	NA	NA	8.90	293	61.7
	6/11/2003	9.60	NA	NA	7.22	310	62.1
	9/10/2003	NA	NA	NA	7.21	315	65.2
	1/20/2004	6.70	NA	NA	NA	NA	NA
	3/30/2004	9.98	NA	NA	NA	NA	NA
	3/31/2004	NA	<1.0	2.5	6.94 / 7.05 *	342	61.3
	7/1/2004	6.32	NA	NA	NA	NA	NA
	7/16/2004	NA	<0.5	0.92	7.18/7.02 *	349	63.9
	9/14-15/2004	1.40	<2.0	0.80	6.95/7.10 *	345	66.2
	12/13-14/2004	6.82	<0.50	1.1	6.82/5.77 *	318	64.7
	3/22-24/2005	8.33	<0.50	2.8	7.07	375	60.8
	6/15-16/2005	7.35	NA	NA	6.98	334	61.9

**Table 3. DO, Nutrients, and Indicator Parameters**

Former Exchange Bank Site  
330 Sebastopol Road, Santa Rosa, CA

Well ID	Sample Date	Dissolved Oxygen	Phosphate	Nitrate as Nitrate	pH	Conductivity	Temperature
		mg/L				uS/cm	°F
M-4	4/23/2002	5.93	5	<5	NA	NA	NA
	5/14/2002	NA	NA	NA	7.18	391	68.4
	8/12/2002	5.8	NA	NA	NA	NA	NA
	8/13/2002	NA	NA	NA	7.00	355	65.2
	12/11/2002	2.58	NA	NA	NA	NA	NA
	12/12/2002	NA	NA	NA	6.76	397	64.0
	3/11/2003	4.83	NA	NA	NA	NA	61.3
	3/12/2003	NA	NA	NA	9.26	334	62.4
	6/11/2003	2.20	NA	NA	6.70	319	62.8
	9/10/2003	NA	NA	NA	7.02	451	67.2
	1/20/2004	5.55	NA	NA	NA	NA	NA
	3/30/2004	5.23	NA	NA	NA	NA	NA
	3/31/2004	NA	NA	NA	6.72	373	62.1
	7/1/2004	2.36	NA	NA	NA	NA	NA
	7/16/2004	NA	NA	NA	6.89	468	65.8
	9/14-15/2004	0.88	NA	NA	7.31	703	67.3
	12/13-14/2004	3.77	NA	NA	6.80	407	65.3
	3/22-24/2005	4.78	NA	NA	6.52	331	60.8
	6/15-16/2005	1.52	NA	NA	6.63	383	62.8
M-5	4/23/2002	1.22	<5	<5	NA	NA	NA
	5/14/2002	NA	NA	NA	7.25	356	68.2
	8/12/2002	1.75	NA	NA	NA	NA	NA
	8/13/2002	NA	NA	NA	7.98	458	65.3
	12/11/2002	2.80	NA	NA	NA	NA	NA
	3/11/2003	1.94	NA	NA	NA	NA	59.9
	3/12/2003	NA	NA	NA	9.53	505	61.7
	6/11/2003	1.16	NA	NA	NA	NA	NA
	9/10/2003	NA	NA	NA	6.73	616	62.8
	1/20/2004	4.59	NA	NA	NA	NA	NA
M-6	4/23/2002	0.16	<5	<5	NA	NA	NA
	5/14/2002	NA	NA	NA	6.72	1184	69.3
	8/12/2002	0.45	NA	NA	NA	NA	NA
	8/13/2002	NA	NA	NA	7.04	937	70.4
	12/11/2002	0.33	NA	NA	NA	NA	NA
	12/12/2002	NA	NA	NA	6.68	770	65.9
	3/11/2003	0.52	NA	NA	NA	NA	62.8
	3/12/2003	NA	NA	NA	7.5	799	64.8
	6/11/2003	0.45	NA	NA	6.63	978	64.6
	9/10/2003	NA	NA	NA	6.7	1053	67.5
	10/30/2003	0.47	NA	NA	NA	NA	NA
	11/14/2003	0.58	NA	NA	NA	NA	NA
	12/4/2003	0.64	NA	NA	NA	NA	67.4
	12/31/2003	7.40	NA	NA	NA	NA	NA
	1/15/2004	8.53	NA	NA	NA	NA	NA
	1/20/2004	7.44	NA	NA	NA	NA	NA
	3/22/2004	9.86	NA	NA	NA	NA	62.9
	3/30/2004	8.21	NA	NA	NA	NA	NA
	3/31/2004	NA	<1.0	26	6.91 / 7.44 *	768	64.2
	7/1/2004	8.46	NA	NA	NA	NA	NA
	7/16/2004	NA	<0.5	7	6.94 / 7.07 *	778	66.7
	9/14-15/2004	0.70	<2.0	1.2	7.04 / 7.06 *	804	68.2
	12/13-14/2004	5.59	<0.50	<0.50	6.82 / 6.76 *	679	68.2
	3/22-24/2005	8.31	<0.50	67	7.06	638	64.4
	6/15-16/2005	4.84	<1.0	34	6.83	555	65.3

**Table 3. DO, Nutrients, and Indicator Parameters**

Former Exchange Bank Site  
330 Sebastopol Road, Santa Rosa, CA

Well ID	Sample Date	Dissolved Oxygen	Phosphate	Nitrate as Nitrate	pH	Conductivity	Temperature
		mg/L				uS/cm	°F
M-7	4/23/2002	0.39	<5	15	NA	NA	NA
	5/14/2002	NA	NA	NA	6.69	1200	67.6
	8/12/2002	0.37	NA	NA	NA	NA	NA
	8/13/2002	NA	NA	NA	6.99	714	69.9
	12/11/2002	0.46	NA	NA	NA	NA	NA
	3/11/2003	0.49	NA	NA	NA	NA	65.1
	3/12/2003	NA	NA	NA	9.17	962	65.8
	6/11/2003	0.63	NA	NA	NA	NA	NA
	10/30/2003	0.53	NA	NA	NA	NA	NA
	11/14/2003	0.55	NA	NA	NA	NA	NA
	12/4/2004	0.52	NA	NA	NA	NA	69.1
	12/31/2003	0.64	NA	NA	NA	NA	NA
	1/15/2004	3.91	NA	NA	NA	NA	NA
	1/20/2004	4.25	NA	NA	NA	NA	NA
	3/22/2004	4.07	NA	NA	NA	NA	62.9
	3/30/2004	3.60	NA	NA	NA	NA	NA
	3/31/2004	NA	<1.0	150	6.66 / 6.99 *	1209	65.5
	7/1/2004	2.84	NA	NA	NA	NA	NA
	7/16/2004	NA	<0.5	94	6.61/6.81 *	1050	68.0
	9/14-15/2004	0.60	<2.0	49	6.63/6.80 *	826	69.1
	12/13-14/2004	0.35	<0.50	47	6.65/6.58 *	760	68.7
	3/22-24/2005	0.89	<0.50	65	6.68	822	65.8
	6/15-16/2005	4.71	NA	NA	NA	NA	NA
M-8	4/23/2002	0.42	5	<5	NA	NA	NA
	5/14/2002	NA	NA	NA	7.14	633	65.5
	8/12/2002	0.61	NA	NA	NA	NA	NA
	8/13/2002	NA	NA	NA	7.14	549	65.5
	12/11/2002	NA	NA	NA	NA	NA	NA
	3/11/2003	NA	NA	NA	NA	NA	NA
	3/12/2003	NA	NA	NA	11.62	573	60.8
	6/11/2003	NA	NA	NA	NA	NA	NA

**Notes:**

mg/L = milligrams per liter

uS/cm = microSiemens per centimeter

°F = degrees Fahrenheit

NA = Not analyzed

\* = Where applicable, both the field and laboratory results for pH are reported as follows (field / lab).

Table 4. Analytical Results of Groundwater Monitoring Well Samples

Former Exchange Bank Site  
330 Sebastopol Road, Santa Rosa, CA

Well ID	Sample Date	TPH-G	Benzene	Toluene	Ethyl-benzene	Total Xylenes	1,2-dibromoethane (EDB)	1,2-dichloroethane (EDC)	5 Oxygenates					Tetra chloro ethene (PCE)	Trichloro ethene (TCE)	cis-1,2-dichloro ethene	
									Tert-butyl alcohol (TBA)	Methyl tert-butyl ether (MTBE)	Di-isopropyl ether (DIPE)	Ethyl tert-butyl ether (ETBE)	Tert-amyl methyl ether (TAME)				
ug/L																	
Water Quality Objectives in ug/L		<50	<1	<42	<29	<17	None	<0.5	<12	<5	None	None	None	None	None	None	
M-1	12/29/1992	16,000	420	200	420	1,400	NA	NA	NA	NA	NA	NA	NA	NA	^	^	
	1/27/1993	15,000	400	190	400	1,400	NA	NA	NA	NA	NA	NA	NA	NA	^	^	
	12/11/1993	16,000	200	96	450	1,400	NA	NA	NA	NA	NA	NA	NA	NA	^	^	
	5/13/1994	19,000	160	64	450	980	NA	NA	NA	NA	NA	NA	NA	NA	^	^	
	9/17/1994	160	8.7	2.2	3	5	NA	NA	NA	NA	NA	NA	NA	NA	^	^	
	10/26/1994	470	3.7	1.2	0.63	2	NA	NA	NA	NA	NA	NA	NA	NA	^	^	
	12/17/1994	19,000	4.1	1.6	5.5	17	NA	NA	NA	NA	NA	NA	NA	NA	^	^	
	3/18/1995	11,000	300	140	270	680	NA	NA	NA	NA	NA	NA	NA	NA	^	^	
	6/24/1995	11,000	180	53	340	830	NA	NA	NA	NA	NA	NA	NA	NA	^	^	
	9/23/1995	1,700	190	23	52	76	NA	NA	NA	NA	NA	NA	NA	NA	^	^	
	12/16/1995	13,000	92	27	310	840	NA	NA	NA	NA	NA	NA	NA	NA	^	^	
	3/23/1996	6,300	110	46	180	360	NA	NA	NA	NA	NA	NA	NA	NA	^	^	
	6/20/1996	9,800	230	100	350	680	NA	NA	NA	NA	NA	NA	NA	NA	^	^	
	3/12/1997	7,900	160	74	210	400	NA	NA	NA	NA	NA	NA	NA	NA	^	^	
	6/26/1997	7,000	97	29	130	300	NA	NA	NA	NA	NA	NA	NA	NA	^	^	
	12/18/1997	3,200	71	39	110	220	NA	NA	NA	NA	NA	NA	NA	NA	^	^	
	3/18/1998	450	7.8	3.6	17	29	NA	NA	NA	NA	NA	NA	NA	NA	^	^	
	6/18/1998	3,000	43	8.3	92	150	NA	NA	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	^	^	
	9/16/1998	2,500	120	35	150	190	NA	NA	<0.50	NA	NA	NA	NA	NA	^	^	
	12/30/1998	3,400	69	42	97	120	NA	NA	NA	NA	NA	NA	NA	NA	^	^	
	3/18/1999	490	8.8	2.5	13	25	NA	<0.50	<5	<1	<5	<5	<1	<1	^	^	
	6/16/1999	2,600	100	38	90	130	NA	NA	NA	NA	NA	NA	NA	NA	^	^	
	9/23/1999	330	23	5.2	14	20	NA	<0.50	NA	NA	NA	NA	NA	NA	^	^	
	12/29/1999	640	120	39	29	67	NA	NA	NA	NA	NA	NA	NA	NA	^	^	
	8/31/2000	440	31	7.8	22	30	NA	NA	NA	NA	NA	NA	NA	NA	^	^	
	10/25/2000	1,000	27	26	8	110	NA	NA	NA	NA	NA	NA	NA	NA	^	^	
	12/20/2000	<50	0.85	0.31	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^	
	3/15/2001	1,300	25	64	27	100	NA	NA	NA	NA	NA	NA	NA	NA	^	^	
	6/14/2001	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^	
	9/18/2001	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^	
	11/13/2001	280	2.3	2	0.62	17	<0.50	<0.50	59	<0.50	<0.50	<0.50	<0.50	<0.50	^	^	
	2/12/2002	210	5.3	3.9	2.1	10	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	^	^	
	5/14/2002	250	6	15	7.1	115	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	^	^	
	8/9/2002 #	<50	<0.5	<0.5	<0.5	<1.5	NA	NA	NA	NA	NA	NA	NA	NA	^	^	
	8/13/2002	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	^	^	
	12/12/2002	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	^	^	
	3/12/2003	77	<1.0	1.0	<1.0	3.4	1.5	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	^	^	
	6/11/2003	110	<1.0	1.5	1.0	5.3	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	^	^	
	9/10/2003	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	^	^	
	3/31/2004	86	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	^	^	
	7/16/2004	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	^	^	
	9/15/2004	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	^	^	
	12/14/2004	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	^	^	
	3/24/2005	130	<1.0	<1.0	<1.0	4.7	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	^	^	
	6/16/2005	110	<1.0	<1.0	<1.0	2.3	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	^	^	
M-2	5/13/1994	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^	
	9/17/1994	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^	
	9/17/1994	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^	
	12/17/1994	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^	
	6/24/1995	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^	
	9/23/1995	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^	
	12/16/1995	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^	
	3/23/1996	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^	
	6/20/1996	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^	
	3/12/1997	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^	
	6/26/1997	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^	
	12/17/1997	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^	
	3/17/1998	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^	
	6/19/1998	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	^	^	
	9/16/1998	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	<0.50	NA	NA	NA	NA	NA	^	^	
	12/30/1998	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	<0.50	NA	NA	NA	NA	NA	^	^	
	3/18/1999	<50	<0.50	<0.50	<0.50	<1.0	NA	<0.5	<5	<1	<5	<5	<1	<1	^	^	
	6/16/1999	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^	
	9/23/1999	<50	<0.30	<0.30	<0.50	<0.50	NA	<0.5	NA	NA	NA	NA	NA	NA	^	^	
	12/23/1999	<50	<0.30	<1.20	<0.5	<0.5	NA	NA	NA	NA	NA	NA	NA	NA	^	^	
	8/31/2000	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^	
	10/25/2000	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^	
	12/20/2000	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^	
	3/15/2001	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^	
	6/14/2001	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^	
	11/13/2001	<50	<0.30	<0.30	<0.50	<0.50	<0.5	<0.5	<10	<0.50	<0.50	<0.50	<0.50	<0.50	^	^	

**Table 4. Analytical Results of Groundwater Monitoring Well Samples**

Former Exchange Bank Site  
330 Sebastopol Road, Santa Rosa, CA

Well ID	Sample Date	TPH-G	Benzene	Toluene	Ethyl-benzene	Total Xylenes	1,2-dibromoethane (EDB)	1,2-dichloroethane (EDC)	5 Oxygenates					Tetra chloro ethene (PCE)	Trichloro ethene (TCE)	cis-1,2-dichloro ethene	
									Tert-butyl alcohol (TBA)	Methyl tert-butyl ether (MTBE)	Di-isopropyl ether (DIPE)	Ethyl tert-butyl ether (ETBE)	Tert-amyl methyl ether (TAME)				
									ug/L								
M-3	Water Quality Objectives in ug/L	<50	<1	<42	<29	<17	None	<0.5	<12	<5	None	None	None	None	None	None	None
	2/27/1997	14,000	9.4	<4.5	250	80	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	3/13/1997	6,400	7.3	<0.30	120	80	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	6/27/1997	6,700	8.9	<4.5	170	77	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	12/18/1997	4,700	14	<0.9	180	95	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	3/17/1998	2,400	2.7	<1.2	64	67	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	6/18/1998	6,200	7.1	2.1	210	140	NA	NA	<5	0.58	<0.50	<0.50	<0.50	<0.50	^	^	^
	9/16/1998	6,800	<0.30	<0.30	260	110	NA	NA	<0.50	NA	NA	NA	NA	NA	^	^	^
	12/30/1998	3,300	6.7	<2.4	130	53	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	3/18/1999	6,400	0.6	<0.50	170	90	NA	<0.50	<5	<1	<5	<5	<1	^	^	^	^
	6/16/1999	5,700	5.3	<2.4	190	73	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	9/23/1999	1,700	1.5	<1.2	68	11	NA	<5.0	NA	NA	NA	NA	NA	NA	^	^	^
	12/23/1999	2,000	3.6	<1.2	88	17	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	8/31/2000	2,000	1.6	<1.2	72	4.6	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	10/25/2000	390	<0.30	<0.30	3.5	1.9	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	12/20/2000	2,900	1.3	<0.30	49	3.9	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	3/15/2001	210	<0.30	<0.30	1.4	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	6/14/2001	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	9/18/2001	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	11/13/2001	<50	<0.30	<0.50	<0.50	<0.50	<0.5	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	^	^	^
	2/12/2002	<50	<0.5	<0.5	<0.5	<1.5	<1.0	<1	<25	<1.0	<1.0	<1.0	<1.0	<1.0	^	^	^
	5/14/2002	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	^	^	^
	8/13/2002	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	^	^	^
	12/12/2002	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	^	^	<b>1.3</b>
	3/12/2003	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	^	^	^
	6/11/2003	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	^	^	^
	3/31/2004	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	^	^	^
	7/16/2004	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	^	^	^
	9/15/2004	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	^	^	^
	12/14/2004	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	^	^	^
	3/24/2005	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	^	^	^
	6/16/2005	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	^	^	^
M-4	3/12/1997	3,700	3.6	<0.30	110	160	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	6/27/1997	820	1.5	<0.30	7.9	20	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	12/20/1997	6,300	<0.9	<0.9	180	280	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	3/18/1998	3,800	3.8	<1.2	37	160	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	6/19/1998	6,100	<12	<12	130	180	NA	NA	<5.3	1.3	<0.53	<0.53	<0.53	<0.53	^	^	^
	9/16/1998	2,600	2.5	<0.30	140	300	NA	NA	<0.50	NA	NA	NA	NA	NA	^	^	^
	12/30/1998	1,500	2.3	1.3	48	76	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	3/18/1999	3,100	0.8	1	100	190	NA	<0.50	<5	<1	<5	<5	<1	^	^	^	^
	6/16/1999	1,100	1.1	<1.2	29	51	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	9/23/1999	100	0.42	<0.30	0.53	<0.50	NA	<0.50	NA	NA	NA	NA	NA	NA	^	^	^
	12/29/1999	880	1.5	<1.2	39	54	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	8/31/2000	220	0.52	<0.30	7.3	7.1	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	10/25/2000	120	0.73	0.87	1.4	5.9	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	12/20/2000	500	0.52	<0.30	17	14	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	3/15/2001	<50	<0.30	<0.30	<0.50	0.74	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	6/14/2001	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	9/18/2001	<50	<0.30	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	11/13/2001	530	<0.30	<0.50	3.2	<0.5	<0.5	90	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	^	^	^
	2/12/2002	<50	<0.50	<0.50	<1.5	<1.0	<1.0	<1	<25	<1.0	<1.0	<1.0	<1.0	<1.0	^	^	^
	5/14/2002	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	^	^	^
	8/13/2002	<50	<1.0	<1.0	<1.0	1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	^	^	^
	12/12/2002	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	^	^	<b>5.7<sup>VC</sup></b>
	3/12/2003	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	^	^	^
	6/10/2003	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	^	^	^
	3/31/2004	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	^	^	^
	7/16/2004	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	^	^	^
	9/15/2004	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	^	^	^
	12/14/2004	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	^	^	^
	3/24/2005	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	^	^	^
	6/16/2005	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	^	^	^
M-5	3/12/1997	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	6/26/1997	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	12/17/1997	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	3/17/1998	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	6/18/1998	<50	<0.30	<0.30	<												

Table 4. Analytical Results of Groundwater Monitoring Well Samples

Former Exchange Bank Site  
330 Sebastopol Road, Santa Rosa, CA

Well ID	Sample Date	TPH-G	Benzene	Toluene	Ethyl-benzene	Total Xylenes	1,2-dibromoethane (EDB)	1,2-dichloroethane (EDC)	5 Oxygenates					Tetra chloro ethene (PCE)	Trichloro ethene (TCE)	cis-1,2-dichloro ethene	
									Tert-butyl alcohol (TBA)	Methyl tert-butyl ether (MTBE)	Di-isopropyl ether (DIPE)	Ethyl tert-butyl ether (ETBE)	Tert-amyl methyl ether (TAME)				
ug/L																	
Water Quality Objectives in ug/L		<50	<1	<42	<29	<17	None	<0.5	<12	<5	None	None	None	None	None	None	None
M-6	3/12/1997	6,000	52	4.5	280	180	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	6/26/1997	3,500	21	1.2	110	36	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	12/18/1997	3,500	61	<0.9	340	83	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	3/18/1998	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	6/18/1998	1,800	19	<1.2	63	31	NA	NA	<5.0	<0.50	<0.50	<0.50	<0.50	NA	^	^	^
	9/16/1998	1,700	9.7	<0.30	100	49	NA	NA	<0.50	NA	NA	NA	NA	NA	^	^	^
	12/30/1998	1,600	25	1.9	88	41	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	3/18/1999	780	3	<0.50	0.8	3	NA	<0.50	<5	<1	<5	<1	NA	NA	^	^	^
	6/16/1999	1,900	23	<1.2	88	50	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	9/23/1999	1,700	30	<1.2	110	56	NA	<0.50	NA	NA	NA	NA	NA	NA	^	^	^
	12/29/1999	1,500	160	12	190	120	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	8/31/2000	2,000	53	3.5	110	77	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	10/25/2000	1,800	39	<1.2	75	42	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	12/20/2000	4,200	57	<6.0	160	96	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	3/15/2001	3,500	49	<1.8	110	62	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	6/14/2001	3,300	38	<0.66	310	120	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	9/18/2001	1,900	<14	<0.57	60	14	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	11/13/2001	1,000	4	<0.30	19	6.6	<0.50	<0.50	<10	<0.50	<0.50	<0.50	<0.50	NA	^	^	^
	2/12/2002	1,200	22	2.6	56	50	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	NA	^	^	^
	5/14/2002	2,100	11	<1.0	94	54	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	NA	^	^	^
	8/13/2002	2,000	7.5	<1.0	<1.0	53	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	NA	^	^	^
	12/12/2002	1,700	7	<1.0	66	49.3	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	NA	^	^	^
	3/12/2003	4,100	11	2.4	180	177.4	<2.0	<2.0	<50	<2.0	<2.0	<2.0	<2.0	NA	^	^	^
	6/11/2003	2,400	7.0	1.0	110	62.7	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	NA	^	^	^
	9/10/2003	1,900	3.7	<1.0	74	44.3	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	NA	^	^	^
	3/31/2004	890	<1.0	<1.0	17	6.6	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	NA	^	^	^
	7/16/2004	850	<1.0	<1.0	9.5	6.4	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	NA	^	^	^
	9/15/2004	180	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	NA	^	^	^
	12/14/2004	490	<1.0	<1.0	<1.0	19.3	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	NA	^	^	^
	3/24/2005	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	NA	^	^	^
	6/16/2005	590	<1.0	<1.0	18	11	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	NA	^	^	^
M-7	3/12/1997	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	6/26/1997	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	12/17/1997	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	3/17/1998	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	6/18/1998	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	<5.0	<0.50	<0.50	<0.50	<0.50	NA	^	^	^
	9/16/1998	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	<0.50	NA	NA	NA	NA	NA	^	^	^
	3/18/1999	<50	<0.50	<0.50	<0.50	<1.0	NA	<0.50	<5	<1	<5	<1	<1	NA	^	^	^
	9/23/1999	<50	<0.30	<0.30	<0.50	<0.50	NA	<0.50	NA	NA	NA	NA	NA	NA	^	^	^
	8/31/2000	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	10/25/2000	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	12/20/2000	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^	^
	3/15/2001	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	<0.50	NA	NA	NA	NA	NA	^	^	^
	6/14/2001	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	<0.50	NA	NA	NA	NA	NA	^	^	^
	11/13/2001	<50	<0.30	<0.30	<0.50	<0.50	<0.50	0.64	<10	<0.50	<0.50	<0.50	<0.50	NA	^	^	^
M-8	2/12/2002	<50	<0.50	<0.50	<0.50	<1.5	<1.0	<1	<25**	<1.0	<1.0	<1.0	<1.0	NA	8.6	10	2.6
	5/14/2002	<50	1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	NA	8.3	9.1	2.1
	8/13/2002	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	NA	10	13	2.4
	12/12/2002																
	3/12/2003	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	1.0	<1.0	<1.0	<1.0	NA	8.4	11	^
	6/11/2003																
	9/10/2003																
	3/31/2004																
SP-9	8/1/2003	7,600	<10	25	77	850	<10	<10	<250	<10	<10	<10	<10	NA	^	^	^
	8/1/2003	1,000	4.4	<1.0	46	27	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	NA	^	^	^
	8/1/2003	2,100	3.4	<1.0	21	125	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	NA	^	^	^
Key to abbreviations on page 4.																	

**Table 4. Analytical Results of Groundwater Monitoring Well Samples**

Former Exchange Bank Site  
330 Sebastopol Road, Santa Rosa, CA

Well ID	Sample Date	TPH-G	Benzene	Toluene	Ethyl-benzene	Total Xylenes	1,2-dibromoethane (EDB)	1,2-dichloroethane (EDC)	5 Oxygenates					Tetra chloro ethene (PCE)	Trichloro ethene (TCE)	cis-1,2-dichloro ethene
									Tert-butyl alcohol (TBA)	Methyl tert-butyl ether (MTBE)	Di-isopropyl ether (DIPE)	Ethyl tert-butyl ether (ETBE)	Tert-amyl methyl ether (TAME)			
ug/L																
Water Quality Objectives in ug/L	<50	<1	<42	<29	<17	None	<0.5	<12	<5	None	None	None	None	None	None	None
QA/QC	6/24/1995	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^
QA/QC	9/23/1995	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^
TB	3/23/1996	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^
Trip Blank	2/26/1997	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^
Trip Blank	2/28/1997	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^
Travel Blank	3/13/1997	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^
EB	3/12/1997	<50	<0.30	<b>0.58</b>	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^
Trip Blank	6/27/1997	<50	<0.30	<b>0.42</b>	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^
QA	6/26/1997	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^
Trip Blank	9/16/1998	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^
Drums	3/12/1997	<b>2,700</b>	<b>43</b>	<b>16</b>	<b>100</b>	<b>180</b>	NA	NA	NA	NA	NA	NA	NA	NA	^	^
Drum	6/27/1997	<50	<b>0.48</b>	<0.30	<0.50	2	NA	NA	NA	NA	NA	NA	NA	NA	^	^
Drum	12/18/1997	<b>92</b>	<b>1.2</b>	<b>0.35</b>	<b>4.6</b>	<b>5</b>	NA	NA	NA	NA	NA	NA	NA	NA	^	^
Trip Blank	9/16/1998	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	<0.50	NA	NA	NA	NA	NA	^	^
Trip Blank	12/30/1998	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^
Drum	3/18/1999	<b>190</b>	<0.50	<0.50	<b>5</b>	<b>4</b>	NA	NA	NA	NA	NA	NA	NA	NA	^	^
Trip Blank	3/18/1999	<50	<0.50	<0.50	<0.50	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	^	^
Trip Blank	6/16/1999	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^
Trip Blank	9/23/1999	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^
Trip Blank	12/23/1999	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^
Trip Blank	8/31/2000	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^
Trip Blank	10/25/2000	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^
Trip Blank	12/20/2000	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^
Trip Blank	3/15/2001	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^
Trip Blank	6/14/2001	<50	<0.30	<b>0.36</b>	<0.50	<b>0.67</b>	NA	NA	NA	NA	NA	NA	NA	NA	^	^
Trip Blank	9/18/2001	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^
Trip Blank	9/18/2001	<50	<0.30	<0.30	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	^	^
Trip Blank	2/12/2002	<50	<0.50	<0.50	<0.50	<1.5	NA	NA	NA	NA	NA	NA	NA	NA	^	^
Trip Blank	5/14/2002	<50	<0.50	<0.50	<0.50	<1.5	NA	NA	NA	NA	NA	NA	NA	NA	^	^
Trip Blank	8/12/2002	<50	<0.50	<0.50	<0.50	<1.5	NA	NA	NA	NA	NA	NA	NA	NA	^	^
Trip Blank	12/12/2002	<50	<0.50	<0.50	<0.50	<1.5	NA	NA	NA	NA	NA	NA	NA	NA	^	^
Trip Blank	3/12/2002	<50	<0.50	<0.50	<0.50	<1.5	NA	NA	NA	NA	NA	NA	NA	NA	^	^
Trip Blank	6/11/2003	<50	<0.50	<0.50	<0.50	<1.5	NA	NA	NA	NA	NA	NA	NA	NA	^	^
Trip Blank	9/10/2003	<50	<0.50	<0.50	<0.50	<1.5	NA	NA	NA	NA	NA	NA	NA	NA	^	^
Trip Blank	3/31/2004	<50	<0.50	<0.50	<0.50	<1.5	NA	NA	NA	NA	NA	NA	NA	NA	^	^

**Notes:**

TPH-G = denotes total petroleum hydrocarbons quantified as gasoline, analyzed by EPA Method 8015.

VC = vinyl chloride detected at 1.4 ug/l.

&lt;x = denotes analyte not detected at, or above the detection limit of x.

NA = denotes not analyzed; well M-2 was not accessible on March 18, 1995.

^ = Concentrations of the non target constituents detected prior to 2/12/02 are not included in the table. The detection limit of the non target constituents are not available on the laboratory report.

^^ = Non target constituents not detected. The detection limits are not provided on the laboratory report.

# = Samples were collected immediately prior to re-start after system had been shut down for 51 days.

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**Appendix A**  
**Site-Specific Sampling Procedures**

# WINZLER & KELLY CONSULTING ENGINEERS

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## Site-Specific Groundwater Sampling Procedures Former Exchange Bank Data Center 330 Sebastopol Road Santa Rosa, California June 15 and 16, 2005

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### 1. Objective

Collect representative water level data and groundwater samples.

### 2. Background

Based on the analytical results of the previous sampling, field work proceeded from the monitoring wells in which the samples collected had the lowest concentrations of constituents to the wells that had the highest concentrations of constituents.

Water levels were measured to determine the direction and gradient of groundwater flow. Representative groundwater samples from the water-bearing zone were obtained using disposable polyethylene bailers following purging.

### 3. Personnel Required and Responsibilities

Winzler & Kelly Environmental Engineer: Pon Xayasaeng performed groundwater monitoring and sampling activities in accordance with the procedures outlined below.

### 4. Procedures

#### 4a. Biosparge System Shutdown and DO Concentrations, June 15, 2005

- The membrane on the YSI Model 55 DO meter was checked for the presence of bubbles and wrinkles, neither of which was observed.
- The meter was calibrated in the field prior to collecting measurements.
- Using the calibrated YSI Model 55 DO Meter, DO concentrations were measured in each monitoring well except for M-5 and M-8.
- Following DO measurements, the biosparge system was shutdown to allow groundwater to equilibrate.

#### 4b. Decontamination Procedures, June 16, 2005

- Using alconox soap and potable water, all equipment and instruments to be used were decontaminated upon arriving at the site.
- All equipment and instruments were decontaminated after use in each well.
- All equipment and instruments were decontaminated after field activities had been completed.

- Nitrile gloves were worn by sampler at all times and changed after handling equipment and instruments.

#### **4c. Groundwater Elevations, June 16, 2005**

- Opened all monitoring wells to be measured and removed expandable caps. Allowed wells to equilibrate for a minimum of 30 minutes.
- A water level meter was used to determine the depth-to-groundwater in each monitoring well.
- Recorded depth, time and visual observations regarding well access, condition, security, etc on water level data sheet.
- Decontaminated the water level meter after each use.

#### **4d. Purging, June 16, 2005**

- Calibrated Hydac Meter for conductivity and pH.
- Conductivity was calibrated using KCl-7000 standard solution within its expiration date.
- The calibration for pH included “zeroing” the Ultrameter with a pH 7 buffer solution followed by adjusting the gain with acid and base buffers (4.01 and 10.00).
- Calculated the volume of standing water in each monitoring well using measured depth-to-water and historic depth-to-bottom. Recorded the volume calculated for each well on the Well Sampling Data Sheet.
- Purged monitoring wells using a 12-volt DC 1.5-inch electric submersible pump.
- Obtained readings of field parameters (pH, conductivity, temperature) with meter and visual observations of color/odor/turbidity at each well casing interval throughout the purging process.
- Recorded the time, readings, and visual comments on the Well Sampling Data Sheet.
- Purged each well until field parameters stabilized, not exceeding 7 casing volumes, or until the well de-watered.
- Decontaminated the electric submersible pump after each use.
- All excess water was transferred to 55-gallon drums labeled and secured on site.

#### **4e. Groundwater Sample Collection, June 16, 2005**

- Lowering new, disposable, polyethylene collected groundwater samples, bottom-filling bailers into the well after the water level had recharged to at least 80%.
- When completely full, the bailer was carefully retracted from the well casing.
- The groundwater was transferred from the bailer into 40-ml glass vials preserved with HCl.
- Upon filling, each vial was immediately capped. The vial was checked for air bubbles by inverting and gently tapping the vial.

- All samples were labeled with the following information:
 

Sample ID	Date and Time Sample Collected
Location	Sampler's Initials
Project Number	
- Sample information was documented on a chain-of-custody form.
- All samples were placed in an ice chest chilled with ice.
- Upon completion of the sampling activities, each well was closed and secured by replacing the well cap and securing the lock.

## **5. Equipment Used:**

- Disposable gloves
- Potable water
- Alconox soap
- Containers to hold rinsate water
- Scrub Brushes
- Tools to open wells
- Keys to wells
- Water Level Data Form/pencil
- Well Sampling Data Sheet
- Groundwater Sampling Log form
- Water level meter
- 12-volt DC 1.5-inch electric submersible pump
- UltraMeter
- Containers to hold extracted water (as required)
- Disposable bailers (previously unused)
- Monofilament nylon line (50 lb test)
- Scissors
- Laboratory supplied sample containers (preserved, as required)
- Sample labels
- Ice chest
- Ice
- Labels/indelible marker
- Trash bags
- 55-gallon drums
- Ziploc bags
- Portable 12-V battery

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**Appendix B**  
**Well Sampling Data Sheets**

WINZLER & KELLY  
CONSULTING ENGINEERS

## WATER LEVEL MEASUREMENT DATA SHEET

PROJECT NAME: Former Exchange Bank  
PROJECT NUMBER: 0220805 cont. 32001

TODAY'S DATE: 6/15/05 & 6/16/05  
FIELD PERSONNEL: Pon Xayasaeng

### Weather Conditions Today:

note: 10:43 System shutdown for Sampling Event.

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## WELL SAMPLING DATA SHEET

PROJECT NAME: Former Exchange Bank  
PROJECT NUMBER: 0220805001.32001  
WELL DESIGNATION: M-1

PROJECT DATE: 6/16/05  
SAMPLER: Pon Xiangsheng  
SAMPLE NUMBER: M-1

**CONDITION OF WELL HEAD/VULT/CAP & LOCK:**

- A. TOP OF CASING ELEVATION:  
B. DEPTH TO GROUNDWATER (initial): 8.74'  
C. DEPTH OF WELL: 25' MEASURED \_\_\_\_\_  
D. HEIGHT OF WATER COLUMN (C-B):  
E. GROUNDWATER ELEVATION (A-B):

CASING DIAMETER: 2" \_\_\_\_\_ 3" \_\_\_\_\_ 4" X \_\_\_\_\_ OTHER \_\_\_\_\_

CALCULATED WELL VOLUME: D X V =  $(25' - 8.74')(0.653) = 10.16 \text{ gal}$

ODOR No SHEEN No FLOATING PRODUCT THICKNESS No

PUMP TYPE: POLY BAILER \_\_\_\_\_ STAINLESS BAILER \_\_\_\_\_  
ELECTRIC  OTHER \_\_\_\_\_

PUMP DEPTH:

#### RECHARGE RATE (qualitative):

SAMPLER TYPE: TEFLON BAILER ACRYLIC BAILER DISPOSABLE BAILER

SAMPLES COLLECTED: PRESERVED VOA'S 4 UNPRESERVED VOA'S \_\_\_\_\_  
PRESERVED LITERS \_\_\_\_\_ UNPRESERVED LITERS \_\_\_\_\_  
500 ml PLASTIC BOTTLE WITH PRESERVATIVE FOR METALS:  
FILTERED \_\_\_\_\_ UNFILTERED \_\_\_\_\_  
OTHER \_\_\_\_\_

COMMENTS: \_\_\_\_\_

WINZLER & KELLY  
CONSULTING ENGINEERS

### WELL SAMPLING DATA SHEET

PROJECT NAME: Former Exchange Bank  
PROJECT NUMBER: 0220805001.32001  
WELL DESIGNATION: M-3

PROJECT DATE: 6/16/05  
SAMPLER: Pon Xayaseng  
SAMPLE NUMBER: M-3

**CONDITION OF WELL HEAD/VAULT/CAP & LOCK:**

- A. TOP OF CASING ELEVATION:  
B. DEPTH TO GROUNDWATER (initial): 7.41'  
C. DEPTH OF WELL: "20' MEASURED \_\_\_\_\_  
D. HEIGHT OF WATER COLUMN (C-B):  
E. GROUNDWATER ELEVATION (A-B):

CASING DIAMETER: 2"  3"  4"  OTHER \_\_\_\_\_

CALCULATED WELL VOLUME: D X V =  $(20 - 7.41') / 0.163 = 2.1 \text{ gal}$

ODOR No SHEEN No FLOATING PRODUCT THICKNESS No

PUMP TYPE: POLY BAILER \_\_\_\_\_ STAINLESS BAILER \_\_\_\_\_  
ELECTRIC  OTHER

**PUMP DEPTH:**

#### RECHARGE RATE (qualitative):

SAMPLER TYPE: TEFLON BAILER ACRYLIC BAILER DISPOSABLE BAILER

SAMPLES COLLECTED: PRESERVED VOA'S 4 UNPRESERVED VOA'S \_\_\_\_\_  
PRESERVED LITERS \_\_\_\_\_ UNPRESERVED LITERS \_\_\_\_\_  
500 ml PLASTIC BOTTLE WITH PRESERVATIVE FOR METALS:  
FILTERED \_\_\_\_\_ UNFILTERED \_\_\_\_\_  
OTHER \_\_\_\_\_

COMMENTS:

**WINZLER & KELLY  
CONSULTING ENGINEERS**

## WELL SAMPLING DATA SHEET

PROJECT NAME: Former PExchange Bank  
PROJECT NUMBER: 0220805001.32001  
WELL DESIGNATION: M-4

PROJECT DATE: 6/16/05  
SAMPLER: Pon Xayalseng  
SAMPLE NUMBER: M-4

**CONDITION OF WELL HEAD/VULT/CAP & LOCK:**

- A. TOP OF CASING ELEVATION:  
B. DEPTH TO GROUNDWATER (initial): 7.69'  
C. DEPTH OF WELL: 15' MEASURED \_\_\_\_\_  
D. HEIGHT OF WATER COLUMN (C-B):  
E. GROUNDWATER ELEVATION (A-B):

CASING DIAMETER: 2"  3"  4"  OTHER

CALCULATED WELL VOLUME: D X V =  $(15 - 7.49) / 0.163 = 1.2 \text{ gal}$

ODOR No SHEEN No FLOATING PRODUCT THICKNESS No

PUMP TYPE: POLY BAILER \_\_\_\_\_ STAINLESS BAILER \_\_\_\_\_  
ELECTRIC X OTHER

PUMP TYPE: POLY BAILER \_\_\_\_\_ STAINLESS BAILER \_\_\_\_\_  
ELECTRIC  OTHER \_\_\_\_\_

PUMP DEPTH:

#### RECHARGE RATE (qualitative):

SAMPLER TYPE: TEFLON BAILER ACRYLIC BAILER DISPOSABLE BAILER

SAMPLES COLLECTED: PRESERVED VOA'S 4 UNPRESERVED VOA'S \_\_\_\_\_  
PRESERVED LITERS \_\_\_\_\_ UNPRESERVED LITERS \_\_\_\_\_  
500 ml PLASTIC BOTTLE WITH PRESERVATIVE FOR METALS:  
FILTERED \_\_\_\_\_ UNFILTERED \_\_\_\_\_  
OTHER \_\_\_\_\_

COMMENTS: \_\_\_\_\_

WINZLER & KELLY  
CONSULTING ENGINEERS

## WELL SAMPLING DATA SHEET

PROJECT NAME: Former Exchange Bank  
PROJECT NUMBER: 0220805001.32001  
WELL DESIGNATION: M-4

PROJECT DATE: 6/16/05  
SAMPLER: Pon Xayavong  
SAMPLE NUMBER: M-4

**CONDITION OF WELL HEAD/VAULT/CAP & LOCK:**

- A. TOP OF CASING ELEVATION:  
B. DEPTH TO GROUNDWATER (initial): 8.25'  
C. DEPTH OF WELL: 20' MEASURED \_\_\_\_\_  
D. HEIGHT OF WATER COLUMN (C-B):  
E. GROUNDWATER ELEVATION (A-B):

CASING DIAMETER: 2" X      3" \_\_\_\_\_      4" \_\_\_\_\_      OTHER \_\_\_\_\_

CALCULATED WELL VOLUME: D X V =  $(20' - 8.25') (0.163) = 2 \text{ gal}$   
Volume (V) of 2" well - 0.163 gal/ft  
Volume (V) of 4" well - 0.653 gal/ft

ODOR No SHEEN No FLOATING PRODUCT THICKNESS No

PUMP TYPE: POLY BAILER \_\_\_\_\_ STAINLESS BAILER \_\_\_\_\_  
ELECTRIC  OTHER \_\_\_\_\_

**PUMP DEPTH:**

#### RECHARGE RATE (qualitative):

SAMPLER TYPE: TEFLON BAILER ACRYLIC BAILER DISPOSABLE BAILER

SAMPLES COLLECTED: PRESERVED VOA'S 4 UNPRESERVED VOA'S \_\_\_\_\_  
PRESERVED LITERS \_\_\_\_\_ UNPRESERVED LITERS \_\_\_\_\_  
500 ml PLASTIC BOTTLE WITH PRESERVATIVE FOR METALS:  
FILTERED \_\_\_\_\_ UNFILTERED \_\_\_\_\_  
OTHER 1

COMMENTS: \_\_\_\_\_

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**Appendix C**  
**Analytical Laboratory Report**



Report Date: June 29, 2005

Pon Xayasaeng  
Winzler & Kelly Consulting Engineers  
495 Tesconi Circle, Suite 9  
Santa Rosa, CA 95401-4696

## **LABORATORY REPORT**

Project Name: **Former Exchange Bank** **0220805001.32001**

Lab Project Number: **5061612**

This 10 page report of analytical data has been reviewed and approved for release.

Mark A. Valentini, Ph.D.  
Laboratory Director



### TPH Gasoline in Water

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Lab #	Sample ID	Analysis	Result (ug/L)	RDL (ug/L)
30270	M-4	TPH/Gasoline	ND	50

Date Sampled:	06/16/05	Date Analyzed:	06/21/05	QC Batch #:	5599
Date Received:	06/16/05	Method:	EPA 5030/8015M		

Lab #	Sample ID	Analysis	Result (ug/L)	RDL (ug/L)
30271	M-3	TPH/Gasoline	ND	50

Date Sampled:	06/16/05	Date Analyzed:	06/21/05	QC Batch #:	5599
Date Received:	06/16/05	Method:	EPA 5030/8015M		

Lab #	Sample ID	Analysis	Result (ug/L)	RDL (ug/L)
30272	M-1	TPH/Gasoline	110	50

Date Sampled:	06/16/05	Date Analyzed:	06/21/05	QC Batch #:	5599
Date Received:	06/16/05	Method:	EPA 5030/8015M		

Lab #	Sample ID	Analysis	Result (ug/L)	RDL (ug/L)
30273	M-6	TPH/Gasoline	590	50

Date Sampled:	06/16/05	Date Analyzed:	06/21/05	QC Batch #:	5599
Date Received:	06/16/05	Method:	EPA 5030/8015M		



## Volatile Hydrocarbons by GC/MS in Water

Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
30270	M-4	benzene	ND	1.0
		toluene	ND	1.0
		ethyl benzene	ND	1.0
		m,p-xylene	ND	1.0
		o-xylene	ND	1.0
		1,2-dibromoethane (EDB)	ND	1.0
		1,2-dichloroethane (EDC)	ND	1.0

### Oxygenated Gasoline Additives

tert-butyl alcohol (TBA)	ND	25
methyl tert-butyl ether (MTBE)	ND	1.0
di-isopropyl ether (DIPE)	ND	1.0
ethyl tert-butyl ether (ETBE)	ND	1.0
tert-amyl methyl ether (TAME)	ND	1.0

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	19.9	99.5	70 – 130
toluene-d <sub>8</sub> (20)	18.9	94.5	70 – 130
4-bromofluorobenzene (20)	18.3	91.5	70 – 130

Date Sampled: 06/16/05	Date Analyzed: 06/20/05	QC Batch #: 5602
Date Received: 06/16/05	Method: EPA 8260B	



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
30271	M-3	benzene	ND	1.0
		toluene	ND	1.0
		ethyl benzene	ND	1.0
		m,p-xylene	ND	1.0
		o-xylene	ND	1.0
		1,2-dibromoethane (EDB)	ND	1.0
		1,2-dichloroethane (EDC)	ND	1.0

#### Oxygenated Gasoline Additives

tert-butyl alcohol (TBA)	ND	25
methyl tert-butyl ether (MTBE)	ND	1.0
di-isopropyl ether (DIPE)	ND	1.0
ethyl tert-butyl ether (ETBE)	ND	1.0
tert-amyl methyl ether (TAME)	ND	1.0

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	19.7	98.5	70 – 130
toluene-d <sub>8</sub> (20)	19.1	95.5	70 – 130
4-bromofluorobenzene (20)	18.4	92.0	70 – 130

Date Sampled: 06/16/05	Date Analyzed: 06/20/05	QC Batch #: 5602
Date Received: 06/16/05	Method: EPA 8260B	



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
30272	M-1	benzene	ND	1.0
		toluene	ND	1.0
		ethyl benzene	ND	1.0
		m,p-xylene	2.3	1.0
		o-xylene	ND	1.0
		1,2-dibromoethane (EDB)	ND	1.0
		1,2-dichloroethane (EDC)	ND	1.0

#### Oxygenated Gasoline Additives

tert-butyl alcohol (TBA)	ND	25
methyl tert-butyl ether (MTBE)	ND	1.0
di-isopropyl ether (DIPE)	ND	1.0
ethyl tert-butyl ether (ETBE)	ND	1.0
tert-amyl methyl ether (TAME)	ND	1.0

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	19.8	99.0	70 – 130
toluene-d <sub>8</sub> (20)	19.2	96.0	70 – 130
4-bromofluorobenzene (20)	17.6	88.0	70 – 130

Date Sampled: 06/16/05	Date Analyzed: 06/20/05	QC Batch #: 5602
Date Received: 06/16/05	Method: EPA 8260B	



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
30273	M-6	benzene	ND	1.0
		toluene	ND	1.0
		ethyl benzene	18	1.0
		m,p-xylene	11	1.0
		o-xylene	ND	1.0
		1,2-dibromoethane (EDB)	ND	1.0
		1,2-dichloroethane (EDC)	ND	1.0

#### Oxygenated Gasoline Additives

tert-butyl alcohol (TBA)	ND	25
methyl tert-butyl ether (MTBE)	ND	1.0
di-isopropyl ether (DIPE)	ND	1.0
ethyl tert-butyl ether (ETBE)	ND	1.0
tert-amyl methyl ether (TAME)	ND	1.0

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	19.7	98.5	70 – 130
toluene-d <sub>8</sub> (20)	19.1	95.5	70 – 130
4-bromofluorobenzene (20)	18.7	93.5	70 – 130

Date Sampled: 06/16/05	Date Analyzed: 06/20/05	QC Batch #: 5602
Date Received: 06/16/05	Method: EPA 8260B	



### Phosphate in Water

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Lab #	Sample ID	Analysis	Result (mg/L)	RDL (mg/L)
30273	M-6	Phosphate ( $\text{PO}_4$ )	ND	1.0

Date Sampled:	06/16/05	Date Analyzed:	06/17/05	QC Batch #:	5589
Date Received:	06/16/05	Methods:	Colormetric Phosphate		

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### Nitrate in Water

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Lab #	Sample ID	Analysis	Result (mg/L)	RDL (mg/L)
30273	M-6	Nitrate ( $\text{NO}_3^-$ )	34	0.50

Date Sampled:	06/16/05	Date Analyzed:	06/17/05	QC Batch #:	5589
Date Received:	06/16/05	Methods:	EPA 300 (IC)		



# LABORATORY

## QUALITY ASSURANCE REPORT

QC Batch #: 5599

Lab Project #: 5061612

Sample ID	Compound	Result (ug/L)
MB	TPH/Gas	ND
MB	MTBE	ND
MB	Benzene	ND
MB	Toluene	ND
MB	Ethyl Benzene	ND
MB	Xylenes	ND

Sample #	Sample ID	Compound	Result (ug/L)	Spike Level	% Recv.
30270	CMS	TPH/Gas		NS	
	CMS	Benzene	9.54	10.0	95.4
	CMS	Toluene	9.30	10.0	93.0
	CMS	Ethyl Benzene	9.96	10.0	99.6
	CMS	Xylenes	30.3	30.0	101

Sample #	Sample ID	Compound	Result (ug/L)	Spike Level	% Recv.	RPD
30270	CMSD	TPH/Gas		NS		
	CMSD	Benzene	9.44	10.0	94.4	1.1
	CMSD	Toluene	9.31	10.0	93.1	0.11
	CMSD	Ethyl Benzene	9.86	10.0	98.6	1.0
	CMSD	Xylenes	30.2	30.0	101	0.33

MB = Method Blank; LCS = Laboratory Control Sample; CMS = Client Matrix Spike; CMSD = Client Matrix Spike Duplicate  
NS = Not Spiked; OR = Over Calibration Range; NR = No Recovery



QC Batch #: 5602

Lab Project #: 5061612

Sample ID	Compound Name	Result (ug/L)
MB	1,1-dichloroethene	ND
MB	benzene	ND
MB	trichloroethene	ND
MB	toluene	ND
MB	chlorobenzene	ND

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	20.5	103	70 – 130
toluene-d <sub>8</sub> (20)	19.8	99.0	70 – 130
4-bromofluorobenzene (20)	19.3	96.5	70 – 130

Sample #	Sample ID	Compound Name	Result (ug/L)	Spike Level	% Recv.
30210	CMS	1,1-dichloroethene	27.8	25.0	111
	CMS	benzene	25.3	25.0	101
	CMS	trichloroethene	24.5	25.0	98.0
	CMS	toluene	25.2	25.0	101
	CMS	chlorobenzene	25.5	25.0	102

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	20.5	103	70 – 130
toluene-d <sub>8</sub> (20)	19.9	99.5	70 – 130
4-bromofluorobenzene (20)	19.0	95.0	70 – 130



Sample #	Sample ID	Compound Name	Result (ug/L)	Spike Level	% Recv.	RPD
30210	CMSD	1,1-dichloroethene	28.6	25.0	114	1.8
	CMSD	benzene	25.5	25.0	102	0.79
	CMSD	trichloroethene	24.8	25.0	99.2	1.2
	CMSD	toluene	25.5	25.0	102	1.2
	CMSD	chlorobenzene	25.8	25.0	103	1.2

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	20.6	103	70 – 130
toluene-d <sub>8</sub> (20)	19.7	98.5	70 – 130
4-bromofluorobenzene (20)	19.11	95.5	70 – 130

MB = Method Blank; LCS = Laboratory Control Sample; CMS = Client Matrix Spike; CMSD = Client Matrix Spike Duplicate  
NS = Not Spiked; OR = Over Calibration Range; NR = No Recovery

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# Analytical Sciences

## CHAIN OF CUSTODY

P.O. Box 750336, Petaluma, CA 94975-0336  
 110 Liberty Street, Petaluma, CA 94952  
 (707) 769-3128  
 Fax (707) 769-8093



### CLIENT INFORMATION

COMPANY NAME: WINZLER & KELLY CONSULTING ENGINEERS  
 ADDRESS: 495 TESCONI CIRCLE, SUITE 9  
 SANTA ROSA, CA 95401-4696  
 CONTACT: Results: Sonja, Questions: Ron  
 PHONE#: (707) 523-1010  
 FAX #: (707) 527-8679

LAB PROJECT NUMBER: 5/16/16/1

WINZLER & KELLY PROJECT NUMBER: 0220805001-32001  
Final Exchange Bill

TURNAROUND TIME (check one)		
MOBILE LAB	24 HOURS	
SAME DAY	72 HOURS	
48 HOURS		
5 DAYS	NORMAL	X

ANALYSIS									
ITEM	CLIENT SAMPLE I.D.	DATE SAMPLED	TIME	MATRIX	# CONT.	PRESV. YES/NO	COMMENTS	LAB SAMPLE #	
1	M-4	4/16/05	11:33	W	4	X		51274	
2	M-3		11:20		4			51271	
3	M-1		11:27		2			51272	
4	M-6		11:34		5	X		51273	
5									
6									
7									
8									
9									
10									
11									

**SIGNATURES**

SAMPLED BY: Ron J. Salmy RECEIVED BY LABORATORY: C. C. C.  
 RELINQUISHED BY: A. L. Mandery DATE: 5/16/05 TIME: 12:35  
 SIGNATURE: 3/25 DATE: 5/16/05 TIME: 3:35

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## **Appendix D**

## **GeoTracker Upload Verifications**

## Electronic Submittal Information

[Main Menu](#) | [View/Add Facilities](#) | [Upload EDD](#) | [Check EDD](#)

### UPLOADING A GEO\_WELL FILE

Processing is complete. No errors were found!  
Your file has been successfully submitted!

**Submittal Title:** Well Measurement File, 2nd Qtr 2005, Exchange  
Bank

**Submittal Date/Time:** 7/13/2005 10:50:57 AM

**Confirmation  
Number:** 9450651407

[Back to Main Menu](#)

Logged in as WINZLER (AUTH\_RP)

[CONTACT SITE ADMINISTRATOR.](#)

## Electronic Submittal Information

[Main Menu](#) | [View/Add Facilities](#) | [Upload EDD](#) | [Check EDD](#)

Your EDF file has been successfully uploaded!

**Confirmation Number:** 3704058289  
**Date/Time of Submittal:** 8/2/2005 3:56:16 PM

**Facility Global ID:** T0609700062

**Facility Name:** EXCHANGE BANK

**Submittal Title:** 1st Qtr 2005, EDF Report 5032502

**Submittal Type:** Additional Information Report

## Electronic Submittal Information

[Main Menu](#) | [View/Add Facilities](#) | [Upload EDD](#) | [Check EDD](#)

Your EDF file has been successfully uploaded!

**Confirmation Number:** 1341902256

**Date/Time of Submittal:** 8/2/2005 4:26:35 PM

**Facility Global ID:** T0609700062

**Facility Name:** EXCHANGE BANK

**Submittal Title:** 2nd Qtr 2005, EDF Report 5061612

**Submittal Type:** Additional Information Report

**Electronic Submittal Information**

Main Menu | View/Add Facilities | Upload EDD | Check EDD

**UPLOADING A GEO\_MAP FILE**

**YOUR IMAGE UPLOAD WAS SUCCESSFUL!**

Facility Name: EXCHANGE BANK  
Global ID: T0609700062  
Submittal Type: GEO\_MAP  
Submittal Date/Time: 7/15/2005 1:44:31 PM  
Confirmation Number: 6878476798

[Click here to view the image.](#)

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Logged in as WINZLER (AUTH\_RP)

CONTACT SITE ADMINISTRATOR.

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**Appendix E**  
**Waste Manifest**

**NON-HAZARDOUS  
WASTE MANIFEST**

1. Generator's US EPA ID No.

2. Page 1  
of  
1

3. Document Number

NH- 80323

## 4. Generator's Name and Mailing Address

ME. DELRAE ERICKSON

444 AVIATION BLVD

SANTA ROSA

CA 95403

**COPY**

Generator's Phone

## 5. Transporter Company Name

US EPA ID Number

## 7. Transporter Phone

CLEARWATER ENVIRONMENTAL

CAR 000007013

510 476-1740

## 8. Designated Facility Name and Site Address

US EPA ID Number

## 10. Facility's Phone

ALVISO INDEPENDENT OIL

5002 ARCHER STREET

ALVISO

CA 95002

CAL 000161743

510 476-1740

G  
E  
N  
E  
R  
A  
T  
O  
R

## 11. Waste Shipping Name and Description

12. Containers  
No.13. Total  
Quantity14. Unit  
Wt/Vola. PURGE WATER, ~~NON-HAZARDOUS~~ HAZARDOUS WASTE LIQUID004  
003 DM 0200

G

b.

## 15. Special Handling Instructions and Additional Information

## Handling Codes for Wastes Listed Above:

11a.

11b.

11a. --

WEAR PPE & HOUR EMERGENCY KIRK HAYWARD 510-476-1740 SITE FURNER  
EXCHANGE BANK 330 SEBASTOPOL RD SANTA ROSA, CA 95407 WINZLER &  
KELLY

D4-22-05-001-004

## 16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to state or federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name

Signature

Month Day Year  
06 22 05

J. J. J. J.

## 17. Transporter Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year  
06 22 05

DAVID MULRISON

David M. Mulrison

## 18. Discrepancy Indication Space

F  
A  
C  
I  
L  
I  
T  
Y

## 19. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 18.

Printed/Typed Name

Signature

Month Day Year